

CLAIMS:

1. A circuit (15) for a locating device (14) for locating a room area (12) from which an optical locating signal (LS) generated and emitted by means of a locating-signal generating means (13) originates, which circuit (15) has receiving means (17) that are arranged at a distance (R) from the room area (12) to be located and that are designed to receive, optically, the optical locating signal (LS) that can be fed to them from the room area (12), and which circuit (15) has determining means (26) that, by using the optical locating signal (LS) that is received, are designed to determine and emit a first item of room-area locating information (S1) that represents the distance (R) between the receiving means (26) and the room area (12).

10

2. A circuit (15) as claimed in claim 1, wherein the determining means (26) are in addition designed by using the optical locating signal (LS) that is received, to determine and emit a second item of room-area locating information (S2) that represents a direction (D) between the receiving means (17) and the room area (12).

15

3. A circuit (15) as claimed in claim 1 or claim 2, wherein the determining means (26) are designed to process an optical control signal that can be generated by means of a remote-control device (13) and that forms the optical locating signal (LS), and to locate the room area (12) by using the optical control signal.

20

4. A circuit (15) as claimed in claim 1 or claim 2, wherein the receiving means (17) have at least two light-sensitive sensors (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) that are each designed and arranged to receive the locating signal (LS) and to emit a sensor signal (SS1, SS2, SS3, SS4; SS5, SS6, SS7, SS8, SS9, SS10, SS11, SS12; SS13, SS14, SS15), the sensor signal (SS1, SS2, SS3, SS4; SS5, SS6, SS7, SS8, SS9, SS10, SS11, SS12; SS13, SS14, SS15) from each sensor (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) representing an intensity (I), that is present at the sensor concerned (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63), of the locating signal (LS), and wherein the determining means (26) are designed to locate the room area (12) from which the locating

25

signal (LS) originates by using the sensor signals (SS1, SS2, SS3, SS4; SS5, SS6, SS7, SS8, SS9, SS10, SS11, SS12; SS13, SS14, SS15) that can be emitted by the sensors (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63).

5 5. A circuit (15) as claimed in claim 4, wherein the at least two light-sensitive sensors (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) are so designed and arranged that each sensor (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) has associated with it at least one reception sector from which the locating signal (LS) is that can be received.

10

6. A circuit (15) as claimed in claim 5, wherein the at least two light-sensitive sensors (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) are so designed and arranged that the reception sectors respectively associated with them at least partly overlap with one another.

15

7. A locating device (14) for locating a room area (12) from which an optical locating signal (LS) generated and emitted by means of a locating-signal generating means (13) originates, which locating device (14) has a circuit (15) as claimed in any of claims 1 to 6 and has optically operative transmitting means (16) by means of which the optical locating signal (LS) that originates from the room area (12) to be determined and arises in the transmitting means (16) can be fed to the receiving means (17) of the circuit (15).

20

8. An audio-signal emitting system, which audio-signal emitting system has a circuit (15) as claimed in any of claims 1 to 6, and which audio-signal emitting system has audio channel-signal generating means (11) that, by taking account of at least one item of room-area locating information (LS) that can be generated by means of the circuit (15), are designed to generate at least two audio channel-signals (A1, A2, A3, A4, A5) suitable for creating a multi-channel sound effect, each audio channel-signal (A1, A2, A3, A4, A5) being intended for emission via sound-generating means (4, 5, 6, 7, 8) associated with it, thus enabling a multi-channel sound effect to be created in a room area (12), to which room area (12) the audio channel-signals (A1, A2, A3, A4, A5) are adjusted by taking account of the at least one item of room-area locating information (S1, S2).

30

9. An audio-signal emitting system as claimed in claim 8, wherein there is provided a first memory stage (28) that is intended to store a first item of positional information (PI1) that represents a relative positioning between the circuit (15) and the respective sound generation means (4, 5, 6, 7, 8), and wherein the audio channel-signal
5 generating means (11) are in addition designed to adjust the audio channel-signals (A1, A2, A3, A4, A5) to the room area (12) that has been located by using the first item of positional information.

10. An audio-signal receiving system (75), which audio-signal receiving system
10 (75) has a circuit as claimed in any of claims 1 to 6, and which audio-signal receiving system (75) has audio channel-signal receiving means that are designed to receive at least two audio channel-signals (A1, A2, A3, A4, A5) suitable for creating a multi-channel sound effect, each audio channel-signal (A1, A2, A3, A4, A5) being receivable via sound-receiving means (76, 77, 78, 79, 80) associated with it, and that, by taking account of at least one item of room-
15 area locating information (S1, S2) that can be generated by means of the circuit (15), are designed to adjust a reception characteristic of the sound receiving means (76, 77, 78, 79, 80) to the room area (12) that is represented by the at least one item of room-area locating information (S1, S2).

20 11. An audio-signal receiving system (75) as claimed in claim 10, wherein there is provided a second memory stage (82) that is intended to store a second item of positional information (PI2) that represents a relative positioning between the circuit (15) and the respective sound receiving means (76, 77, 78, 79, 80), and wherein the audio channel-signal receiving means are in addition designed to adjust the reception characteristic to the room
25 area (12) that has been located by using the at least one item of room-area locating information (S1, S2).

12. A method for locating a room area (12) from which an optical locating signal (LS) generated and emitted by means of a locating-signal generating means (13) originates,
30 wherein the locating signal (LS) is received optically, with the help of receiving means (17), at a point that is situated at a distance (R) from the room area (12) to be located, and wherein, by using the optical locating signal (LS) that is received, a first item of room-area locating information (S1) that represents a distance (R) between the receiving means (17) and the room area (12) is determined and emitted.

13. A method as claimed in claim 12, wherein, by using the optical locating signal (LS) that is received, a second item of room-area locating information (S2) that represents a direction (D) between the receiving means (17) and the room area (12) is, in addition,
5 determined and emitted.

14. A method as claimed in claim 12 or 13, wherein an optical control signal that can be generated by means of a remote-control devices (13) and that forms the optical locating signal (LS) is processed or used to locate the room area (12).
10

15. A method as claimed in claim 12 or 13, wherein the locating signal (LS) is received by means of at least two light-sensitive sensors (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) and a sensor signal (SS1, SS2, SS3, SS4; SS5, SS6, SS7, SS8, SS9, SS10, SS11, SS12; SS13, SS14, SS15), is generated and emitted in each case, which sensor
15 signal (SS1, SS2, SS3, SS4; SS5, SS6, SS7, SS8, SS9, SS10, SS11, SS12; SS13, SS14, SS15) represents an intensity (I), that is present at the sensor concerned (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63), of the locating signal (LS), and wherein the room area (12) from which the locating signal (LS) originates is located by using the sensor signals (SS1, SS2; SS3, SS4; SS5, SS6, SS7, SS8, SS9, SS10, SS11, SS12; SS13, SS14, SS15) emitted by
20 the sensors (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63).

16. A method as claimed in claim 15, wherein at least one sensor (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) receives the locating signal (LS) from at least one reception sector associated with the sensor concerned (22, 23, 24, 25; 29, 30, 31, 32, 33, 34,
25 35, 36; 61, 62, 63).

17. A method as claimed in claim 15, wherein the locating signal (LS) is received simultaneously from reception sectors that at least partly overlap with one another by at least one sensor (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63), each reception sector
30 having one sensor (22, 23, 24, 25; 29, 30, 31, 32, 33, 34, 35, 36; 61, 62, 63) associated with it.